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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,726	03/09/2004	Ramesh Keshavaraj	5714	1775

7590

11/15/2006

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EXAMINER

ILAN, RUTH

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/796,726	KESHAVARAJ, RAMESH	
	Examiner	Art Unit	
	Ruth Ilan	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8, 10-19, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-19, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 and 24 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the combination of the peripheral side panel and the front and rear panels having rounded corners, or concave sides (see claims 5,6,10,11, 16) or the combination of the side panel and the front and rear panels being a triangle (see claim 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 5, 6, 10, 11, 13, and 16 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As amended, these claims recite mixed embodiments. There is not a single disclosed embodiment that includes the claimed front and rear panel configurations (rounded, concave, and triangle) and the side panel. The side panel is only shown in Figures 13a-15, with a front and rear panel that is square and it is not disclosed how panels of the various other claimed shapes would be attached to the side panel.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 3, 7, 8, 12-15, 19, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soriano et al. (GB 2 390 574 A) in view of Bauer et al. (US 5,456,493.) Soriano et al. teaches an airbag cushion with a front and rear panel (4

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and 3) each of the panels includes perpendicularly arranged sets of yarns and the yarns at the front panel are at a bias to the yarns at the rear panel (see page 2, and Figure 5.)

Regarding claims 3 and 7, the panels have a four sided polygonal configuration.

Regarding claims 12-15, the panels can be square, triangular, or rectangular (since squares are rectangles.) Regarding claims 2 and 8, Soriano et al. discusses warps and wefts for the fabric, but does not per se indicate that the fabric is woven. Weaving is a well known manufacturing process, and Soriano et al. does show what appears to be the schematic representation of a woven fabric. It would have been obvious to one having ordinary skill in the art at the time of the invention to understand that the fabric of Soriano et al. is woven, since the discussion is of warps and wefts, and since weaving is a well known manufacturing technique for air bag fabrics. Soriano et al. fails to teach a rectangular peripheral side panel. Bauer et al. teaches that it is known to provide a rectangular side panel, and that such a panel provides an advantage over airbags that have the front and rear panel sewn directly to each other, in that the use of the side panel provides an elongated shape that allows the air bag to inflate more rapidly and directly toward the occupant into protective cushioning contact so as to reduce the chances that the occupant will be subjected to excessive movement (see abstract, and col. 2, lines 35-38, col. 4, lines 22-35.) In view of the teaching of Bauer, it would have been obvious to one having ordinary skill in the art to include a peripheral side panel between the front and rear panels of Soriano, in order to provide an elongated shape that allows the air bag to inflate more rapidly and directly, and reduce the chance that the occupant will be subjected to excessive movement.

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3. Claims 5, 6, 10, 11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soriano et al. (GB 2 390 574 A) in view of Bauer et al., and further in view of Lewis (EP 0 786 382 A1.) The combination of Soriano et al. and Bauer is discussed above and doesn't teach rounded corners and concave sides. Lewis teaches panels with concave sides and rounded corners (14a) which are used because rounded corners mitigate the stress at sewn junctions, when compared to angled corners (see col. 1, lines 35-39.) Additionally, the more rounded end panels are easier to sew, which reduces production time and additionally distribute the load more evenly (col. 2, line 53-col. 3, line 6.) It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the air bag of Soriano et al. in view of Bauer et al., in view of the teaching of Lewis, to include rounded corners and concave sides, in order to ease the fabrication process and distribute the load more evenly, so as to minimize the potential for failure.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 571-272-6673.

The examiner can normally be reached on Monday-Friday, 8:30-5:00.

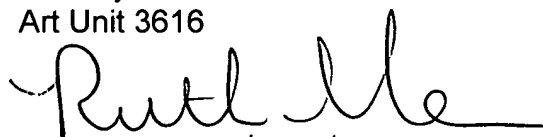
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RI
11/10/06

Ruth Ilan
Primary Examiner
Art Unit 3616



11/10/06